DR. SRUTHI K V

Scientist
Centre for Water Resources Development & Management (CWRDM), Neyyatinkara, Trivandrum, Kerala, India
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EDUCATION

PhD	**Department of Earth and Environmental Science** Chonbuk National University, South Korea.	Feb 2017
MSc	**Hydrochemistry**, Cochin University of Science and Technology (CUSAT), Cochin, India First Class with Distinction	May 2009
BSc	**Chemistry**, Sree Narayana College, Kannur University, Kerala, India First Class with Distinction	May 2007

RESEARCH EXPERIENCE

Scientist

Centre for Water Resources Development & Management (CWRDM), Kozhikode, Kerala, India

July 2019 - Present

Carbon footprinting and net zero emission target research:

(a) Carbon neutral mapping in Kerala context: Source code development and part of NITI Ayog Think tank,
(b) Greenhouse Gas Emission of Rivers of Kerala
(c) Improvement of framework of ISO 14064 with site specific requirements.

Saline water intrusion in aquifers, health risk associated with Aquifer contamination.

Involved in review and approval of the water quality analysis data which includes chemical parameters as part of National Accreditation Board for testing and calibration Laboratories (NABL) accreditation of laboratory for water quality research. Customer support for the clarification of water quality results issued from CWRDM.

Involved in the maintenance and smooth working of instrument, Inductively Coupled Plasma – Optical Emission Spectrometer. Moreover, involved in the emergency field investigation to report on the impact of natural disasters (Eg: Taukte) on the coastal environment of Kozhikode District, Kerala State.

Involved in projects related water quality issues and measures (emerging contaminants, saline water intrusion) by applying experimental and numerical modelling techniques.

Research Scientist
Groundwater Hydrology Division, National Institute of Hydrology, Roorkee, India
Projects:
National Hydrology Project (NHP). Involved in the hydrological modelling studies MIKE hydro as basic platform for river basin management, conjunctive use of groundwater and surface water, Drought - Flood management for different states and a part of groundwater model development group in Indian context under National Hydrology Project. Capacity building activities for different states in the field of water quality research.
Surface water – Groundwater interaction studies in Upper Yamuna River Basin: Actively involved in geochemical data interpretation related to surface water and groundwater pollution of Upper Yamuna Basin.
Involved in hydrogeological field experiments (pressure head determination, tracer experiments, and data evaluation from different hydrochemical sensors), Groundwater sample analysis for hydrogeological and chemical parameters.

Feb 2018 – July 2019

Researcher
Groundwater Research Centre, Geologic Environment Division, Korea Institute of Geoscience and Mineral Resources (KIGAM), Korea, Projects: **(a) Radioactive Waste Management of the Korea Institute of Energy Technology Evaluation and Planning; (b) Groundwater-Surface water interaction.**

Jan 2012 – Aug 2015

Junior/Senior Research Fellow
National Centre for Antarctic and Ocean Research (NCAOR), India
Project: **Multibeam Swath Bathy metric Survey of Exclusive Economic Zone of India**

Sept 2009 – Jan 2012

SELECTED GRANTS

- **Department of Agriculture and Farmers' Welfare, Govt. of Kerala, PI,** Carbon footprint assessment of Agricultural farms and agricultural projects, Kerala State; Value 60.0 Lakhs INR.
- **Kerala State Council for Science, Technology & Environment**, Govt. of Kerala, PI, Deciphering the Greenhouse Gas fluxes and estimation of emission factors of selected rivers of Kerala.; Value 23.0 lakhs INR.
- **Kerala State Council for Science, Technology & Environment**, Govt. of Kerala, PI, Assessing the effects of climate change on the river water quality in urban stretch of Chaliyar River, Kerala; Value 20.0 lakhs INR.
- **Kerala State Council for Science, Technology & Environment**, Govt. of Kerala, PI, Assessment of Salinization Process and Urban Coastal Water Quality; Value 12.6 lakhs INR

- **Department of Science & Technology, Govt. of India**, Co –I, Water for Change- Integrative and fit for purpose water sensitive design framework for fast growing livable cities; Value 164.21 lakhs INR.
- **Kerala State Council for Science, Technology & Environment**, Govt. of Kerala, Co – I, Monitoring of Micro-plastics in Selected Coastal Wetlands of Kerala; Value 20.0 Lakhs INR
- **Kerala State Council for Science, Technology & Environment**, Govt. of Kerala, Co – I, Investigation on water quality and pollution abatement in Northern Kerala; Value 18.0 lakh INR.
- **Department of Water Resources, Government of Kerala,** Co -PI, Rapid EIA study for - Vellayani Lake Restoration Scheme; Value 15.0 Lakhs INR

AWARDS / FELLOWSHIPS/ RECOGNITIONS

- Expert Panel Member, H_2O-Tranformations to Sustainability in Urban Fringe Areas, funded by *European Union's Horizon 2020 research and innovation programme,* Delft University of Technology, Netherland (2021)
- Expert Panel Member, *Development of National Framework for Estimation of Carbon Credits in the Agriculture Sector*, NITI Aayog, Government of India.
- Expert Contributor, *GHG Protocol for the Land Sector*, World Resources Institute (WRI), contributing to global standards on greenhouse gas accounting.
- Evaluator - Young Innovators Programme, Kerala Development and Innovation Strategic Council, Govt. of Kerala.
- Reviewer – Draft National Strategy for Accelerating Innovation in the Water Sector, Ministry of Jalshakti, Govt. of India.
- Evaluator - IIM Kozhikode's Centre for CLIMATE Studies (CCS), Solutions for a Carbon Neutral Campus.
- Nodal Officer, *Carbon Neutral Kattakkada Project*, Thiruvananthapuram, under Centre for Water Resources Development and Management.
- Nodal Officer, *State Action Plan on Climate Change (SAPCC)*, Directorate of Environment and Climate Change Kerala, representing Centre for Water Resources Development and Management.
- Evaluator, *Young Innovators Programme*, Kerala Development and Innovation Strategic Council, Government of Kerala.

- Best Poster Award in Environment, forestry and wild life theme during 44th Kerala Science Congress (2022).
- Junior Research Fellow, National Centre for Polar and Ocean Research, Ministry of Earth Sciences (MoES), Govt. of India (2009)
- Senior Research Fellow, National Centre for Polar and Ocean Research, Ministry of Earth Sciences (MoES), Govt. of India (2011)
- Certificate of review, Journal Environmental Nanotechnology, Monitoring & Management, Elsevier (2017)

TRAVEL AWARDS

- Partial foreign travel fellowship from CSIR is availed in July 2018.

- International Association of Hydrogeologist 2018 Travel grants Recipient who has demonstrated the highest levels of excellence and innovation on the work.
- Partial travel fellowship from DST to attend AGU- Fall meeting in 2012

PUBLICATIONS

First Author/Corresponding Author Publications

K.V. Sruthi, Samuel, M. P., Naveena, K., Surendran, U., Onte, S., & Sarathjith, M. C. (2024). Developing A Framework For Carbon Footprint Assessment For Indian Agriculture Scenario. Current Science (00113891), (7).

K.V. Sruthi, Navaneeth A, Harikumar PS (2022) Potential impact of lockdown period on the water quality of a Canal System in the Southwest Coast of India, Sustainable Water Resources Management.

K. V. Sruthi., & Kim, H. S. (2016). Effect of truncation error on finite difference model of groundwater transport equation with reaction. *Current Science, 111(4), 694-699.*

K. V. Sruthi., Suk, H., Chae, B. G., & Kim, H. S. (2015). The Modified Eulerian-Lagrangian Formulation for Cauchy Boundary Condition under Dispersion Dominated Flow Regimes: A Novel Numerical Approach and its Implication on Radioactive Nuclide Migration or Solute Transport in the Subsurface Environment. *Journal of Soil and Groundwater Environment*, *20*(2), 10-21

K. V. Sruthi., Kurian, P. J., & Rajani, P. R. (2014). Distribution of major and trace elements of a sediment core from the eastern Arabian Sea and its environmental significance. *Current Science (00113891), 107*(7), 1161-1167

K. V. Sruthi, Thamban, M., Manoj, M. C., & Laluraj, C. M. (2012). Association of trace elements with various geochemical phases in the Indian sector of Southern Ocean during past 22,000 years and its palaeoceanographic implications. *Current Science*, *103*(7), 803-809.

Chapters / Books

Divya Thakur, Anupma Sharma, Ajay Ahirwar, **K.V. Sruthi,** Charan Singh Chauhan and Suraj Kumar **(2021),** Water Quality Assessment for Irrigation Purposes in Yamuna River, Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals, published by NIH, Roorkee.

K. V. Sruthi, Anupma Sharma, N. C. Ghosh **(2019).** Numerical errors associated with groundwater models and improving the reliability of models in environmental management issues. (*Accepted in Water Science and Technology Library book series (WSTL), [ISSN: 0921-092X], Springer International Publishing)*

C.P. Kumar, Anupma Sharma, **K. V. Sruthi,** B.K.Purandara, Sumant Kumar **(2019),** Climate change and Groundwater, in "Climate Change and Its Impacts on Water Resources with Focus on India" published by NIH, Roorkee.

Scientific Reports: > 30 Nos.